

Appendix 1 – Visual content code books

Table 5. Code book for identifying different professions of people depicted in the visuals of science education resources, based on [58] and [37].

| Profession | |
|-------------------|--------------------------------|
| - | Other (non-science profession) |
| 1 | Teacher primary school |
| 2 | Teacher secondary school |
| 3 | Astronomer |
| 4 | Biologist |
| 5 | Chemist |
| 6 | Geologist |
| 7 | Mathematician |
| 8 | Physicist |
| 9 | Technologist |
| 10 | Presenter |
| 11 | Scientist |
| 12 | Student |
| 13 | Doctor |
| 14 | Astronaut |

Table 6. Code book for identifying different professions (pooled categories) of people depicted in the visuals of science education resources, based on [58] and [37].

| Profession | |
|--------------------------------|---|
| Other (non-science profession) | Other (non-science profession) Presenter |
| Teacher | Teacher primary school Teacher secondary school |
| Science profession | Astronaut Astronomer Biologist Chemist Doctor Geologist Mathematician Physicist Technologist Scientist |
| Student | Student |

Table 7. Code book for identifying different activities of people depicted in the visuals of science education resources, based on [58] and [37].

| Activity | |
|-----------------|-----------------------------|
| 0 | Other than any below: Other |
| 1 | Teaching |
| 2 | Art activity |
| 3 | Astronomy experiment |
| 4 | Astronomy activity |
| 5 | Biology experiment |
| 6 | Biology activity |
| 7 | Chemistry experiment |
| 8 | Chemistry activity |
| 9 | Geology experiment |
| 10 | Geology activity |
| 11 | Mathematics activity |
| 12 | Physics experiment |
| 13 | Physics activity |
| 14 | Technology experiment |
| 15 | Technology activity |
| 16 | Presenting |
| 17 | Nursing |
| 18 | Doctor |

Table 8. Code book for identifying different activities (pooled categories) of people depicted in the visuals of science education resources, based on [58] and [37].

| Activity | |
|-------------------|---|
| Other | Other |
| Experiment | Astronomy experiment Biology experiment Chemistry experiment Geology experiment Physics experiment Technology experiment |
| Hands-on activity | Art activity Astronomy activity Biology activity Chemistry activity Geology activity Mathematics activity Physics activity Technology activity |
| Teaching | Teaching |
| Nursing | Nursing |
| Doctor | Doctor |
| Presenting | Presenting |

References

37. Blumberg RL. The invisible obstacle to educational equality: Gender bias in textbooks. *Prospects*. 2008;38(3):345-61.
58. Bell P. Content analysis of visual images. In: Van Leeuwen T, Jewitt C. *The handbook of visual analysis*. London, UK: SAGE Publications Ltd; 2004. p. 10-35. Available: <http://srmo.sagepub.com/view/the-handbook-of-visual-analysis/n2.xml>.